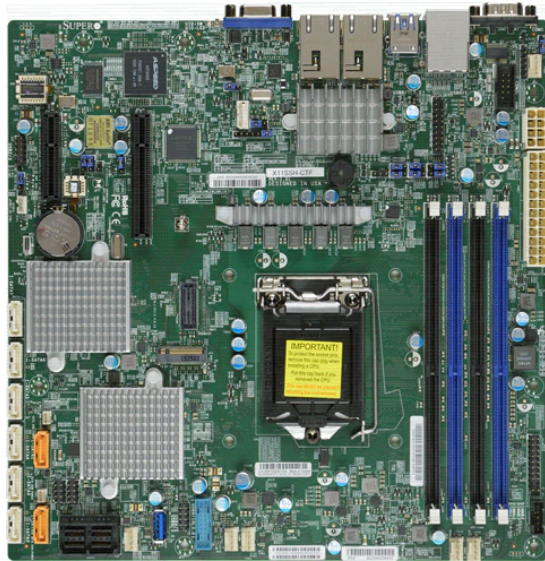




Key Features

1. Single socket H4 (LGA 1151) supports Intel® Xeon® processor E3-1200 v6/v5, Intel® 7th/6th Gen. Core™ i3 series, Intel® Celeron® and Intel® Pentium®
2. Intel® C236 chipset
3. Up to 64GB Unbuffered ECC UDIMM DDR4 2400MHz; 4 DIMM slots
4. Expansion slots: 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x2 (in x4)
5. Dual 10GBase-T LAN with Intel® X550
6. 8 SATA3 (6Gbps) via C236; RAID 0, 1, 5, 10
7. 8 SAS3 (12Gbps) via Broadcom® 3008; RAID 0, 1, 10
8. I/O: 1 VGA, 2 COM, TPM header
9. 5 USB 3.0 (2 rear, 2 via header(s), 1 Type A), 6 USB 2.0 (2 rear, 4 via header(s))
10. M.2 NGFF connector
M.2 Interface: SATA and PCI-E 3.0 x4
Form Factor: 2260
Key: M-Key
Double Height Connector

Links & Resources

[Tested Memory List](#)

[Tested HDD / SSD List](#)

[Tested M.2 List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Quick Reference Guide](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Driver CD](#)

[OS Compatibility](#)

[Optimization](#)

Specifications

Product SKUs

MBD-X11SSH-CTF	■ X11SSH-CTF
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Physical Stats

Form Factor	■ Micro-ATX
Dimensions	■ 9.6" x 9.6" (24.38cm x 24.38cm)

Processor/Cache

CPU	■ Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5. ■ Single Socket H4 (LGA 1151) supported, CPU TDP support 80W
Note	■ BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ i3 Processors and Intel® Xeon® Processor E3-1200 v6 series

System Memory

Memory Capacity	■ 64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots
Memory Type	■ 2400/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (UDIMM) gold-plated DIMMs
DIMM Sizes	■ 4GB, 8GB, 16GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors

On-Board Devices

Chipset	■ Intel® C236
SATA	■ Intel® C236 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
SAS	■ LSI3008 controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10
IPMI	■ ASPEED AST2400 BMC
Network Controllers	■ Dual LAN with Intel® X550 10GBase-T Ethernet Controller
Graphics	■ Aspeed AST2400 BMC

Input / Output

USB	■ 6 USB 2.0 ports (2 rear + 4 headers) ■ 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)
Video Output	■ 1 VGA port
Serial Port / Header	■ 2 COM Ports (1 rear, 1 header)
TPM	■ TPM Header

Expansion Slots

PCI-E	■ 1 PCI-E 3.0 x8, ■ 1 PCI-E 3.0 x2 (in x4 slot)
M.2	■ M.2 Interface: SATA and PCI-E 3.0 x4 ■ Form Factor: 2260 ■ Key: M-Key ■ Double Height Connector

System BIOS

BIOS Type	■ 128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	■ Plug and Play (PnP) ■ APM 1.2 ■ DMI 2.3 ■ PCI 2.3 ■ ACPI 1.0 / 2.0 / 3.0 / 4.0 ■ USB Keyboard support ■ Hardware BIOS Virus protection ■ SMBIOS 2.7.1 ■ UEFI 2.3.1

Management

Software	■ Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Power Configurations	■ ACPI Power Management ■ Power-on mode for AC power recovery

PC Health Monitoring

Voltage	■ +12V, +3.3V, +5V, +5V standby, Chassis intrusion header, Monitors CPU voltages, Supports system management utility, System level control, VBAT
FAN	■ 6x 4-pin fan headers (up to 6 fans), Fan speed control, Overheat LED indication, Thermal control tachometer fan connectors
Temperature	■ Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Monitor 2 (TM2) support, PECI
LED	■ CPU / System Overheat LED, UID/Remote UID
Other Features	■ Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, Node Manager Support, WOL

Operating Environment

Operating Temperature Range	■ 0°C ~ 50°C (32°F ~ 122°F)
Non-Operating Temperature Range	■ -40°C - 70°C (-40°F - 158°F)
Operating Relative Humidity Range	■ 8% - 90% (non-condensing)
Non-Operating Relative Humidity Range	■ 5% - 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SSH-CTF	1	X11SSH-CTF Motherboard
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SSH-CTF with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SSH-CTF	1	X11SSH-CTF Motherboard
QRG	MNL-1783-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	6	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O Shield for X11SSH-CTF with EMI Gasket

Chassis (Optimized for X11SSH-CTF)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	● SC813MFTQC-505CB ● SC113MFAC2-341CB ● SC113MFAC2-R606CB ● SC813MFTQ-R400CB SC512F-350B SC813MTQ-350CB ● SC813MFTQC-350CB 1U Heatsink:SNK-P0046P	● SC213LT-600LPB ● SC825TQ-R720LPB ● SC823TQ-653LPB 2U Heatsink:SNK-P0046A4	● SC833T-653B 2U Heatsink:SNK-P0046A4	SC731i-300B SC732I-500B SC731D-300B SC731i-403B SC733TQ-668B SC732D3-1200B 2U Heatsink:SNK-P0046A4	SC842i-500B SC743AC-1200B-SQ SC745BAC-R1K28B2 2U Heatsink:SNK-P0046A4

● = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU

Server (Optimized for X11SSH-CTF)

Server Name
SYS-1019S-MC0T